

WHAT IS CLAIMED IS:

1. A tape printing device comprising tape feed means for feeding a long tape, printing means for printing on the tape, and a cutter member being placed on the downstream side of the printing means for cutting the tape,

the tape being formed of a label tape in which a plurality of labels are temporarily stuck on a front side of a long strippable sheet being aligned along the length of the strippable sheet,

the tape printing device further comprising:

a mark sensor which detects position indication marks formed at prescribed positions in a tape feeding direction on a back side of the strippable sheet opposed to corresponding labels respectively; and

control means which controls the tape feed means based on an output signal outputted by the mark sensor,

the printing means including a plurality of printing elements,

the printing elements being situated on the downstream side of a print start position of a next label which will be printed on next at a point when the label tape after the printing on a label has been fed to a tape cutting position to be cut by the cutter member,

the mark sensor being situated on the downstream side of a position indication mark opposed to the next label and on the upstream side of the printing elements at the point when the label tape after the printing on a label has been fed to the tape cutting position to be cut by the cutter member.

2. The tape printing device according to claim 1, wherein each position indication mark is formed at a position on the downstream side in the feeding direction of a position on the back side of the strippable sheet opposed to a rear end position of each label.

3. The tape printing device according to claim 1, wherein the tape has been rolled up in a tape cassette which is detachably loaded in the tape printing device.

4. The tape printing device according to claim 3, further comprising tape type detection means which detects the type of the tape rolled up in the tape cassette,

wherein when the tape is identified by the tape type detection means as a label tape, the control means controls the tape feed means to feed the label tape to the print start position of each label based on the output signal outputted by the mark sensor.

- 5 5. A tape cassette which is used for the tape printing device of claim 3, comprising:
a tape spool around which the label tape is rolled up with the back side of the
strippable sheet facing outward;
a first opening part facing the printing elements, through which the label tape pulled
out from the tape spool passes; and
10 a second opening part formed in a lateral part of the tape cassette on the upstream
side of the first opening part for enabling the detection of the position indication marks,
wherein the second opening part is formed at a position facing the mark sensor when
the tape cassette is loaded in the tape printing device.
- 15 6. The tape cassette according to claim 5, wherein a printable front end position of the
label is exposed to the first opening part when the position indication mark is situated at the
second opening part.
- 20 7. The tape cassette according to claim 6, wherein the printable front end position is a
downstream edge part of the label in regard to the feeding direction.
8. The tape cassette according to claim 5, further comprising a tape identification part
which is formed at a prescribed position of the tape cassette for identifying the type of the
tape stored in the tape cassette in cooperation with the tape type detection means.
- 25 9. A tape cassette containing a print tape rolled up around a tape spool to be printed
with letters, etc. while being pulled out from the tape spool,
wherein the print tape includes a label tape in which a plurality of labels are
temporarily stuck on a front side of a long strippable sheet being aligned along the length of
30 the strippable sheet and position indication marks are formed at prescribed positions in a tape
feeding direction on a back side of the strippable sheet opposed to corresponding labels
respectively,

the tape cassette comprising:

a first opening part where the label tape pulled out from the tape spool is printed on while passing; and

a second opening part formed in a lateral part of the tape cassette on the upstream side of the first opening part for enabling detection of the position indication marks,

the label tape being rolled up around the tape spool with the back side of the strippable sheet facing outward,

a printable front end position of the label being exposed to the first opening part when the position indication mark is situated at the second opening part.

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10. The tape cassette according to claim 9, wherein the printable front end position is a downstream edge part of the label in regard to the feeding direction.

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11. The tape cassette according to claim 9, further comprising a tape identification part which is formed at a prescribed position of the tape cassette for identifying the type of the tape stored in the tape cassette.

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12. A tape printing device for printing on a long tape,
the long tape is a label tape including:

a plurality of labels temporarily stuck on a front side of a long strippable sheet being aligned along the length of the strippable sheet; and

a plurality of position indication marks formed on a back side of the strippable sheet along the length of the strippable sheet to be opposed to corresponding labels respectively for enabling detection of each label on the front side,

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each position indication mark corresponding to each label on the front side being formed at a position on the back side of the strippable sheet that corresponds to a prescribed position on the corresponding label in a tape feeding direction,

the tape printing device comprising:

a tape feed unit for feeding the long tape;

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a printing unit for printing on the tape;

a cutter member being placed on the downstream side of the printing unit in the tape feeding direction for cutting the tape;

a mark sensor which successively detects the position indication marks formed on the long tape when the tape is fed; and

a control unit which carries out printing by controlling the printing unit while controlling the tape feed unit based on an output signal outputted by the mark sensor,

5 the printing unit being placed so that the printing unit, at a point when the label tape after the printing on a label has been fed by the control unit to a tape cutting position to be cut by the cutter member, will be situated on the downstream side in the feeding direction of a print start position of a label nearest to the tape cutting position,

10 the mark sensor being placed so that the mark sensor, at the point when the label tape after the printing on a label has been fed by the control unit to the tape cutting position to be cut by the cutter member, will be situated on the downstream side in the feeding direction of a position indication mark corresponding to the label nearest to the tape cutting position and on the upstream side in the feeding direction of the printing unit.

15 13. The tape printing device according to claim 12, wherein the printing unit is placed so that the printing unit, at the point when the label tape after the printing on a label has been fed by the control unit to the tape cutting position to be cut by the cutter member, will be situated on the downstream side in the feeding direction of the print start position of the label nearest to the tape cutting position and on the upstream side in the feeding direction of a label front
20 end position of the label nearest to the tape cutting position.

14. The tape printing device according to claim 12, wherein a distance L1 from a position of the printing unit to the print start position of the label nearest to the tape cutting position measured in the tape feeding direction and a distance L2 from a position of the mark
25 sensor to a position of the position indication mark corresponding to the label nearest to the tape cutting position measured in the tape feeding direction at the point when the label tape after the printing on a label has been fed by the control unit to the tape cutting position to be cut by the cutter member satisfy a relationship $L1 \geq L2$.

30 15. The tape printing device according to claim 12, wherein on starting the printing on a label, the control unit first searches for the position indication mark by the mark sensor, places the printing unit at a position corresponding to the print start position by feeding the tape by a

prescribed distance by the tape feed unit when the position indication mark is detected, and then starts the printing by the printing unit.